

ABSTRACT

An LDMOS structure which provides for reduced hot carrier effects. The reduction in hot carrier effects is achieved by increasing the size of the drain region of the LDMOS relative to the size of the source region. The larger size of the drain region reduces the concentration of electrons entering the drain region. This reduction in the concentration of electrons reduces the number of impact ionizations, which in turn reduces the hot carrier effects. The overall performance of the LDMOS is improved by reducing the hot carrier effects.